Abstract

Web-based Guided Practice to Improve Math Word Problem Solving

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This innovative web-based problem-solving project is designed to help deaf high school and college students improve their word problem-solving skills through instruction and interactive guided practice with feedback. The practice environment with guided help is available 24 hours daily giving deaf students an accessible independent learning option. It provides practice with both problem solving exercises (a well-defined problem with one clearly correct answer) and true problem-solving situations (less well defined, requiring more effort to understand and accurately represent). The website also collects data on the students' problem-solving performance for evaluation purposes, thus offering the potential to develop a national database on deaf students for a wide range of problem-solving situations. The evaluation will include the students' problem-solving performance and learning progress, as well as the compilation of feedback on the perceived usefulness of these web-based problem solving learning activities from the collaborating teachers and participating students. The development and dissemination activities of this project are supported by a grant from the Fund for the Improvement of Postsecondary Education (FIPSE), US Department of Education.